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A NOTE ON STATE REGULATION OF FARM INCOMES IN NEW ZEALAND

I. The Position of Farm Incomes in the New Zealand Economy

The main feature of New Zealand's attempts at price control during the second World War was the realization that a successful control of prices presupposes effective control of spendable incomes.

A policy based on this principle was facilitated by the existence of a system of compulsory wage fixation through Arbitration Court awards.[1]

A wage-stop was declared by giving instructions to the Court that no wage increases were to be allowed [2]

Trade unions accepted this policy only on the condition that incomes of other groups would also be stabilized.[3]

Of the incomes of other groups those from farming on own account are of particular importance in New Zealand's economy. The gross value of farm production in 1945–46, for instance, was £NZ115.8 millions as compared with a gross value of £NZ54.7 millions representing factory production.[4] Furthermore, New Zealand's export surplus represents an unusually large percentage of her total net investment, so that farm incomes—to the extent that they represent net foreign investment—have a multiplier effect which makes them pivotal for the country's state of prosperity or depression.

An attempt at the regulation of farm incomes had therefore, to be made, if the Government's policy of price and income control was to succeed.

II. Development of Bulk Marketing of New Zealand Farm Products

Farming in New Zealand is carried out to an extraordinary extent with a view to export, as can be seen from the following table :

Prices for and incomes from the product of New Zealand's pastoral industries (making up over 80 per cent of farm production) are dependent on realizations in export markets, mainly London. It is with incomes

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[1] Compare A. E. C. Hare, Report on Industrial Relations in New Zealand, Wellington and London, 1946, pp. 212–249.

[2] Economic Stabilization Emergency Regulations 1942, paragraph 34 : '. . . any increase in the basic rates of remuneration for any position made after the commencement of these regulations . . . shall be irrecoverable. . . Any person commits an offence who pays or accepts any sum that is irrecoverable by virtue of this part of these regulations.'

[3] Report of the Economic Stabilization Conference, Wellington 1940, p. 12.

[4] New Zealand Official Year Book 1946, p. 730.

TABLE I

Proportion of Total Production of Some Food Products Consumed in and Exported from New Zealand in 1945–46.

Item	*Consumed in N.Z.* *per cent*	*Exported from N.Z.* *per cent*
Butter	18	82
Cheese	6	94
Beef	50	50
Mutton	38	62
Lamb	3	97
Pig-Meat	75	25

Source : New Zealand Official Year Book, 1946, p. 6945.

accruing from these products that this paper is concerned. Farm incomes resulting from production for the domestic market only are excluded.

The problem of control that arises is, therefore: How is it possible to regulate locally the incomes of producers which depend on the vagaries of a foreign market ? The answer to this question is that control of export incomes from the New Zealand end is impossible without the creation of central marketing organizations able to guarantee prices and to absorb foreign price decreases and increases. If, therefore, we want to study the State regulation of farm incomes in New Zealand we will first have to understand the reasons for the successful development of agricultural bulk marketing in New Zealand, without which any form of income regulation by the State would have been very much more difficult.

The history of organized bulk marketing of New Zealand produce dates back to the first World War. In 1915 the Imperial Government Supplies Department in Wellington became the agent for the New Zealand Government in controlling the export of meat, wool, butter, cheese, sheep-skins, hides and other products. All these products had been requisitioned by the Imperial Government and payments made in England were paid through the Department to the producers.

Imperial bulk purchasing ended with the termination of the butter contract on March 31st, 1921. The year 1922 which was the first complete between-war year of uncontrolled marketing was a year of deep depression. Prices slumped and there was readiness on the part of primary producers to return to some form of bulk marketing.

When speaking of ' primary producers ' we must make a difference between wool, meat and dairy producers. The effect of the slump was different on the three industries. Wool had not suffered as bad a set-back as the other commodities and producers were least keen to organize. This was due partly to the existence of the British Australian Wool Realization Association (BAWRA) which had taken surplus stocks off the Australian and New Zealand Governments' hands; partly, however it was due to reasons which have made the wool industry particularly difficult to organize at any time : large sheep station owners make up an important minority of sheep farmers. These ' gentleman farmers ' tend to be individualistic and adverse to organization. Furthermore, the classing of wool and its sale are specialist tasks around which powerful vested interests are grouped. Selling brokers and other intermediaries were then and are now hostile to bulk marketing. Finally, the overseas marketing of wool is of a different character from that of most other New Zealand produce in that there is a large non-British market for New Zealand wool. This market is more difficult to work than the English market which provides most of the purchasing power for the Dominion's dairy produce and meat.

Meat producers were more eager for co-operation. It was recognized that uncontrolled marketing was uneconomic. As far as shipping went, the British market was supplied irregularly. Several ships would leave New Zealand in one month and none the next.

Costs were increased by the multiplicity of individual shipping marks which necessitated much handling and expense. Shipping costs were also high because of the great number of unorganized shippers and the need for vessels to call on small ports to pick up a few carcases.

Above all, New Zealand meat producers felt that they would like to meet the big Smithfield Market buyers by opposing them with a powerful organization.

The outcome of these considerations was, however, not yet the establishment of a central marketing agency. A course intermediate between individual marketing and industry-wide organization was chosen. In 1922, the New Zealand Parliament passed a Meat Export Control Act which established a Meat Producers' Board. This Board consisted of eight members, five representing the producers, two the Government and one the stock buyers; later on a ninth member was added, representing the dairy industry. The Board was entrusted with the task of arranging for the grading, handling, pooling and storage of meat for shipment. No exporter, according to the Act, could make a valid contract for shipment, unless approved by the Board.

The regulation of shipping was the most important function of the Board. It served to even out seasonal peaks and made it possible to supply the English market when prices were best.

The organization of the meat industry which was achieved through the New Zealand Meat Board formed a natural basis for the bulk marketing and income regulation schemes of the second war and post-war era.

The dairy industry of the Dominion was co-ordinated in 1923 by the Dairy Products Act which established a Dairy Board consisting of nine industry and two Government representatives. The Dairy Board had powers similar to those of the Meat Board as far as the regulation of shipping was concerned: But its aims were more ambitious than those of the Meat Board In 1927, an attempt was made to make the London office of the Dairy Board sole agent for the sale of New Zealand butter and cheese. This experiment included the fixing of prices by the London agency of the Dairy Board in conjunction with distributors. This action, however, met with the opposition of buyers and, the business situation being generally unfavourable, the scheme was abandoned.

It was not until the onset of the great depression that the dairy industry turned again to the Dairy Board for the organization of bulk marketing. With a view to cutting selling costs a list of licensed British wholesalers was prepared by the Board and allocations of butter and cheese were made to these. A tendency became noticeable to enlarge the powers of the Board. This was in accordance with the recommendations of the Dairy Industry Commission, 1934, set up to investigate into the desperate slump situation of the dairy industry and which stated ' . . . that the Board should consider the advisability and practicability of assuming absolute control of export marketing.'[1]

The Labour Government which won the 1935 elections agreed with the aim of bulk marketing. It took this function away, however, from the Dairy Board and transferred it to a newly created Primary Products Marketing Department.[2] The Dairy Board remained in existence as the representative of the industry but was reduced to herd-testing as its main technical activity.

The Primary Products Marketing Department was divided into a Dairy Produce Export Division, an Internal Marketing Division and such other divisions as might be constituted later. The principal tasks of the Department were the acquisition of primary products and the marketing of them in New Zealand and overseas. With a view to carrying out these tasks, the Department was given exclusive powers to export dairy produce. The price payable to the exporter was to be determined according to a formula called ' the guaranteed price ' which will be treated below.

When war came, the Government found in the Marketing Department a ready agency through which its policy of bulk trading and income regulation could be efficiently administered.

The Marketing Amendment Act 1939–40 authorized the Department ' to purchase or otherwise acquire any specified goods and to sell or otherwise dispose of such goods for consumption or use in New Zealand or elsewhere.'[3] The prices to be paid by the Department were to be fixed by Order in Council or ascertained in a manner to be prescribed by Order in Council.[4]

From the foregoing description we can summarise two factors that have made possible the State regulation of primary producers' incomes in New Zealand:

(1) There was readiness to organize in a common marketing organization with a view to achieving some of the economies of large scale distribution.

This readiness existed in the meat and dairy industries, but was absent in the wool industry.

(2) There was readiness to look at this marketing organization, to some extent at least, as the buying agent responsible for price fixing.

This attitude was more prevalent in the dairy industry than in the meat industry and was quite absent in the wool industry.

[1] Report of the Dairy Industry Commission, 1934, para. 66.

[2] Primary Products Marketing Act, 1936.

[3] Marketing Amendment Act, 1939–40, Section 4.

[4] Ibidem.

We shall see how this development has led to different approaches towards the State regulation of incomes in the three main export industries of New Zealand.[1]

III. Government Fixation of Farm Product Prices

Between the years 1929 and 1934, New Zealand butter prices on the London market dropped from 184s. to 66s. 6d. sterling per cwt.[2] To smooth out such extreme fluctuations, the Labour Party in its 1935 election platform promised the introduction of a system of guaranteed prices which would secure the farmer ' the payment of a price for his production that would cover all his working expenses.'[3] This scheme was accepted by the industry upon Labour's election victory in 1935.

The reason for the fact that the dairy industry in New Zealand was first in the field to have its income regulated by the State lies probably in the social structure of the industry. Dairy farming in New Zealand is usually carried out by family units and the average farmer has few reserves to fall back on in times of falling prices. He is favourably disposed towards co-operation and looks to the State for help in times of difficulty.

The acceptance by the dairy industry of the guaranteed price scheme was of great psychological importance. The New Zealand dairy farmer, henceforth, was satisfied that he could obtain better results by domestic bargaining than by relying on the vagaries of the market. At the same time, the Government of New Zealand had necessarily to take on the responsibility of regulating dairy farmers' incomes in a way which would have approximately the same effect on the allocation of factors as regulation of production by changing market prices. This task was rendered difficult by the provision that the prices to be fixed for dairy produce should be such ' that any efficient producer under usual conditions and in normal circumstances should be assured of a sufficient net return from his business to enable him to maintain himself and his family in a reasonable state of comfort.'[4] The framework in which this level of prices was to be determined did not include expressly the level of prices realized overseas.[5]

There can be little doubt that many dairy farmers first interpreted the Act as a promise of prices in excess of market realizations. These expectations were, at first, not disappointed. A deficit which arose during the initial season, amounting to £NZ276,000 was paid by the Government. It thus constituted a straight-out subsidy by the Government to the dairy industry. On the other hand, a deficit of over £NZ2½ millions which arose during the 1938–39 season after an increase of the guaranteed price was cancelled by subsequent surpluses retained in the Dairy Produce Account.

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[1] A considerable amount of useful information on the organization of farming in New Zealand which could be treated here only very cursorily can be found in ' Primary Production in New Zealand ', Department of Agriculture, Wellington, 1948.

[2] January figures from Dairy Board Reports.

[3] W. Nash, Guaranteed Prices, Why and How, p. 5.

[4] Primary Products Marketing Act 1936, Section 20.

[5] The considerations mentioned are :

(*a*) The necessity in the public interest of maintaining the stability and efficiency of the dairy industry ;

(*b*) the costs involved in the efficient production of dairy produce ;

(*c*) the general standard of living of persons engaged in the dairy industry in comparison with the general standard of living throughout New Zealand ;

(*d*) the estimated cost to the Department of marketing the dairy produce concerned

(*e*) any other matters deemed to be relevant.

The following is a contraction of the Dairy Produce Account as it appears in the Reports of the New Zealand Marketing Department (Export Division):

TABLE II

Dairy Produce Account Showing the Working of the Guaranteed Price 1936–37 to 1943–44 in £NZ thousands*

Year	Total Butter and Cheese Purchases	Total Butter and Cheese Sales	Balance	
			+	or —
1936–7	23,790	23,514		276
1937–8	24,031	24,607	576	
1938–9	23,016	20,502		2,514
1939–40	25,453	25,514	61	
1940–1	28,525	28,677	152	
1941–2	26,878	27,651	773	
1942–3	23,377	24,111	734	
1943–4	22,074	22,650	576	

* In compiling this table various small adjustments have been made by adding costs of administration, interest and other small items to purchases and sales.

From 1943–4 onwards surpluses in the Dairy Produce Account were transferred to the Dairy Industry Stabilization Account (see below).

Until July 1942 the guaranteed price which had been fixed in 1938–9 remained unaltered. On the outbreak of war prices in London were raised to approximate parity with the New Zealand guaranteed price. The following table gives a comparison between London prices and New Zealand pay-out to dairy factories showing how the domestic price was divorced from market realizations.

TABLE III

Comparison between London and New Zealand Prices (for 1 cwt. f.o.b.)

Year	Butter			Cheese		
	U.K. Payment (N.Z.equiv.)	Paid to Dairy Co.'s	+ or —	U.K. Payment (N.Z. equiv.)	Paid to Dairy Co.'s	+ or —
1936–7	116/6	117/3	+ 9d.	68/10	65/11	— 2/11
1937–8	132/10	127/6	— 5/4	73/7	72/4	— 1/3
1938–9	129/10	139/–	+ 9/2	64/9	78/7	+13/10
1939–40	139/11	139/–	—11d.	79/11	78/7	— 1/4
1940–1	139/11	139/–	—11d.	79/11	78/7	— 1/4
1941–2	139/11	139/–	—11d.	87/1	78/7	— 8/6
1942–3	145/6	143/8	—1/10	90/10	81/6	— 9/4
1943–4	178/–	151/9	—26/3	106/4	85/10	—20/6
1944–5	187/2	168/7	—18/5	110/8	95/3	—15/5
1945–6	187/2	176/9	—10/5	110/8	99/2	—11/6
1946–7	217/8	200/1	—17/7	127/6	111/4	—16/2
1947–8	255/–	222/7	—32/5	146/9	121/11	—24/10
1948–9*	235/–	229/7	— 5/5	133/–	126/3	— 6/9

Source: New Zealand Dairy Board, 24th Report, p. 21.
* Drop in price due to exchange appreciation.

It can be seen from Table III that from the season 1942–3 onwards London prices for produce began to exceed significantly their New Zealand guaranteed price equivalent. From 1942 onwards, Government policy was directed towards withholding further price increases from farmers so as to prevent an income inflation in New Zealand. Thus, the guaranteed price which had first the character of a minimum price changed its character to become a maximum price.

Negotiations with the New Zealand Farmers' Federation in this context led to an exchange of letters between the farmers and the Government in June 1943, which established separate primary produce stabilization accounts. A ' Dairy Industry Stabilization Account ' was created for the dairy industry with the purpose of absorbing any increases in overseas prices after the 15th December, 1942. Any surplus from the Dairy Produce Account was also to be transferred to this account. Subsidies, required to keep costs of production down, were debited. Any credit on the winding up of the account was to be the promised property of the industry, any possible deficit a charge on the Government.[1]

The voluntary acceptance of the institution of farm products stabilization accounts is an interesting symptom for changes in economic thought that have occurred in New Zealand since the first war. It is now fairly widely realized that high overseas prices which do not represent a favourable change in the terms of trade may be as undesirable in a dependent economy as low prices. High export incomes which are compensated by high costs of imports result merely in higher money earnings without real benefit to the economy as a whole. High farm incomes have in the past expressed themselves in high land prices. The high capitalization of land has become a danger to efficient farming in times of falling prices.

The New Zealand experiment in income stabilization was, therefore, largely an attempt to keep New Zealand's price level independent of the British level and thus avoid what we may call an induced inflation.

In this concept of an economy insulated by State regulation of incomes subsidies played a treble role : Firstly increased receipts were withheld from farmers and were used as subsidy payments to fertilizer suppliers and others. They thus served to hold down the cost of production of exportable commodities, making it possible to accept lower prices in London than would have otherwise been the case. Secondly these subsidies served to reduce the cost of some exportable goods purchased by New Zealanders, *e.g.* butter, cheese, etc. This stabilized the cost of living generally. Thirdly increased sterling receipts withheld from producers in the form of Government to Government lump sum payments were used for the subsidization of cost-of-living items other than pastoral products. These lump sum payments were paid by the United Kingdom Government to the New Zealand Government ' as compensation to meet the abnormal increases in prices of New Zealand imports from the United Kingdom from 1939 to 1944. In addition, the United

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[1] Marketing Department (Export Division) Report, 1943, p. 5.

Kingdom Government agreed to pay a lump-sum payment of £4 millions sterling per annum for the period of four years to cover the disparity in prices.[1]

The following table shows how the New Zealand Government has been able to finance a considerable proportion of its war-time subsidies out of sterling recoveries :

TABLE IV

New Zealand Subsidies and their Finance 1938–39 to 1946–47 in £NZ millions

Year	*Subsidies*	*Stabilization A/c Recoveries*	*Lump Sum Recoveries*	*Balance paid from taxation*
1938–9	2.3	—	—	
1939–40	1.9	—	—	
1940–1	2.7	—	—	
1941–2	3.5	—	—	
1942–3	3.3	—	—	
1943–4	3.3	—	15.0	
1944–5	11.2	5.0	5.0	
1945–6	11.6	3.2	5.0	
1946–7	18.9	4.0	5.0	
	58.7	12.2	30.0	16.5

Sources : Official Estimates of National Income 1938–39 to 1947–48 pp. 3 and 12 ; and Reports of Marketing Department (Export Division).

It can be seen that the total subsidy payments out of taxation for nine years was £NZ16.5 millions or £NZ1.8 millions per year, an extraordinarily low amount.

It was, however, not possible to stop prices from rising altogether and it became necessary to compensate producers by price increases at repeated intervals. These increases were called 'cost-allowances' and they were debited to the Dairy Industry Stabilization Account. The following is an abbreviated statement of this account as at 30–6–1947 :

TABLE V

Dairy Industry Stabilization Account as at June 30th, 1947
in £NZ thousands

To Cost Allowances :			By Increases in Prices : after 15–12–1942 withheld		
1943–4	1,493		1943–4	5,231	
1944–5	5,076		1944–5	7,530	
1945–6	5,711		1945–6	6,061	
1946–7	8,263	20,543	1946–7	11,862	30,684
„ Subsidies, etc. :			„ Balance from Dairy Produce Account:		
1943–4	22		1943–4	432	
1944–5	2,842		1944–5	1,160	
1945–6	1,389		1945–6	1,113	
1946–7	1,598	5,851	1946–7	960	3,565
„ Other Items :		142	„ Payment by Government for equalizing local butter price price to pay-out to producers		1,194
„ 'Undistributed'		8907			
		35,443			35,443

Sources: Reports of the Marketing Department (Export Division).

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[1] Marketing Department (Export Division) Report 1944, p. 4.

It can be seen that the incomes of New Zealand dairy producers have been reduced by £ZN14.9 millions during the period of four and a half years covered by the above account. Some £NZ6.0 millions of this amount, however, was paid out to other income receivers in New Zealand by way of subsidies, leaving only £NZ8.9 millions undistributed. The importance of this amount when compared to total incomes is obviously not very great. The effect of withholding it was less of a direct than of an indirect nature. It gave the Government greater powers in persuading trade unions that they too would have to make sacrifices. In addition, there can be little doubt that income regulation and subsidization of costs in the dairy industry kept costs of production from rising. It has slowed up the rise in land values and has put the New Zealand Government in a position where it could give maximum assistance to Britain by charging lower prices for New Zealand dairy produce than might have been necessary had stabilization not prevailed. With all this it must be borne in mind that one of the aims of the stabilization of farm incomes in New Zealand has been in the words of the New Zealand Prime Minister :

' In the interests of the New Zealand farmer in the post-war period it is essential that his prices and costs are kept at the lowest level. This will place him at an advantage in competing with countries whose prices and costs have risen. It will also help him in meeting the competition of low price substitutes like margarine.'[1]

In turning now to the regulation of farm incomes in the Dominion's meat industry it will be remembered that the meat industry had a weaker tradition of bulk marketing than the dairy industry. When the war started, however, the United Kingdom wished to purchase New Zealand's meat output on a Government to Government basis. The Export Division of the Marketing Department which was formerly exclusively devoted to dairy exports, undertook, therefore, the export of all classes of meat and edible offals.

The first season the only change affecting the producers of meat was that the Department, instead of their London connections, paid to freezing companies and meat exporters the fixed f.o.b. price for all classes of meat.

A change in procedure occurred, however, during the 1940–41 season. At that time British shipping difficulties were very acute and there was a danger that not all New Zealand meat could be lifted. As is usual in New Zealand in times of economic difficulties, the export interests approached the Government and the Government undertook to purchase the normal exportable surplus, irrespective of shipping. With a view to saving shipping it was also agreed that a certain quantity of meat should be canned.

The undertaking of the Government involved the storage of meat in New Zealand and the construction of new storage facilities. Canning would have involved producers in a loss. With a view to providing a fund which would enable meat values for canning purposes to be maintained at paying levels, producers' organizations agreed to forego the equivalent

[1] Statement of the Prime Minister to the Dairy Conference, 1944—cyclostyled.

of a London increase in prices. The amounts accruing from this increase were to be used for the purpose of price equalization as well as for the installation of emergency plant required to increase storage capacity in New Zealand.

It can be seen that the unfavourable shipping situation drove the meat industry into the arms of the Government, thus preparing the way further for the State regulation of producers' incomes.

The history of the so-called Meat-Pool Account which was the outcome of the developments just described can be read from Table VI.

It can be seen that from the 1943–4 season onwards the Meat Pool Account lost its original purpose and became a device for withholding income from meat producers.

Similar to the Dairy Industry Stabilization Account a Meat Industry Stabilization Account was created in 1943 into which were paid all increases in prices which occurred after December 15th, 1942. The Meat Pool Account contains an increase in prices obtained prior to that date. The Stabilization Account is debited with any increase in meat prices granted after December 15th, 1942, and also with certain subsidies which serve to keep down the cost of producing meat. In agreement with the other stabilization and pool accounts the Government has undertaken to cover any eventual loss which may exist at the winding up of the account but any credit balance will become the property of the industry to be applied for the benefit of the industry as a whole. In other words the accounts represent a price guarantee should overseas prices drop to uneconomic levels.

Table VII is a summary of the Meat Industry Stabilization Account.

Tables 6 and 7 show that total withholdings of meat producers' incomes amounted to almost £NZ27 millions up to July 31st, 1947. Of this amount, over £NZ18 millions was withdrawn from circulation, the balance being paid out in the form of subsidies with a view to stabilizing the cost of farming and processing meat for export.

State regulation of the income of wool producers met with greater difficulties than was the case with either the dairy or the meat industry. Before the war the Government had taken no part in the marketing of wool. When war broke out the Government had, therefore, to make use of existing private organizations to implement its bulk sale of the Dominion's exportable clip to the United Kingdom. The Marketing Department was entrusted with the financial arrangements and the general administration of the scheme.

The price which was payable by the United Kingdom was based on a three-year average of the three seasons preceding the outbreak of war. In May 1942, however, the British Government announced an increase of 15 per cent in the purchase price of wool. It appears as though this increase was unsought and unexpected by the New Zealand Government. It raised difficulties in carrying out the stabilization policy pursued by the New Zealand Government and provided cause for considerable argument between representatives of the wool growers and the Government.

TABLE VI

Meat Pool Account as at July 31st, 1947
in £NZ thousands

To Goss on Ewe Mutton, etc.: Interest, Insurance, Storage and Railage			By Surplus on Sales of Meat:		
1941–3	1,293		1941–3	2,901	
1943–4	132		1943–4	1,571	
1944–5	47		1944–5	2,241	
1945–6	39		1945–6	2,010	
1946–7	10		1946–7	1,722	
		1,521			10,445
,, Amount written off capital cost of emergency cool stores:			,, Surplus on Sales of Tallow and Slipe Wool:		
1941–3	384		1941–3	629	
1943–4	192		1943–4	440	
1944–5	98		1944–5	400	
			1945–6	475	
			1946–7	228	
		674			2,172
,, Surplus:			,, Various other profits		221
1941–3	1,883		,, Interest on cash		517
1943–4	1,687				
1944–5	2,674				
1945–6	2,685				
1946–7	2,231				
		11,160			
		13,355			13,355

Sources: Reports of the Marketing Department (Export Division).

TABLE VII

Meat Industry Stabilization Account as at July 31st, 1947
in £NZ thousands

To Price Increases to Producers:			By Increases in Price after 15–12–1942:		
1944–5	1,993		1942–3	356	
1945–6	2,887		1943–4	1,984	
1946–7	2,696		1944–5	5,139	
			1945–6	5,524	
			1946–7	8,060	
					21,063
		7,576			
,, Subsidies and other sundry payments:					
1944–5	2,099				
1945–6	1,865				
1946–7	2,463				
		6,427			
,, Surplus:					
1942–3	356				
1943–4	1,984				
1944–5	1,047				
1945–6	772				
1946–7	2,901				
		7,060			
		21,063			21,063

Sources: Reports of the Marketing Department (Export Division).

The Government proposed the creation of a stabilization account. Wool growers, however, in their traditional individualistic spirit refused any such procedure. Merely the proceeds from increased prices for slipe wool (shorn from the killed sheep) went finally into stabilization accounts. As far as the proceeds of ordinary greasy wool went, these were paid to the extent of 5 per cent in Government bonds. The balance was paid in cash. Even this restricted amount of income regulation was, however, abandoned during the 1944–5 season.

IV. Post-War Trends

A number of interesting developments have occurred since the end of the war. The tendency in these recent changes is to put the responsibility for income regulation in the hands of the industries concerned.

Following on a recommendation of the representatives of the dairy industry the Government, in 1947, handed over the marketing of dairy produce to a newly created Dairy Products Marketing Commission. This Commission consists of three Government nominees, three representatives of the industry and one independent chairman appointed by the Government after consultation with the Dairy Board.

In the first part of the 1947–8 season the Commission used the Government Marketing Department as its agent, but when arrangements had been made for transfers of staff, the Commission assumed complete control under its own organization.

The determination of the pay-out to producers in New Zealand was also left to the Commission. In fixing the price regard must, *inter alia*, be had to ' the promotion of the general economic stability of New Zealand '.[1] If the accounts are likely to disclose a deficit within the next twelve months the Commission must obtain the agreement of the Government for the fixation of prices.[2]

A somewhat similar arrangement has been concluded with the Meat Board. Early in 1948 it was announced that an agreement had been concluded whereby the Board will reassume the responsibility for the handling of meat for export within the terms of the bulk-purchase contracts with the United Kingdom Government.[3]

These developments have made the existence of the Export Division of the Marketing Department redundant and it was accordingly abolished.

The wool industry has established a fund which may in the future serve as the basis for a guaranteed minimum price. The basis for this fund will be supplied by the Government making available to the industry the profits which are accruing to it from the sale of war surplus stocks.[4] Wool growers also contribute a levy of 5 per cent of gross sales to this fund which serves partly to cover expenses of marketing surplus stocks.[4] This procedure will make it possible for the minimum price system inaugurated with the creation of the Joint Organization for the disposal of war surplus stocks of wool in 1944–5 to continue after the liquidation of the Joint Organization. The system provides that the disposal of current wool clips is to be carried out by public auction, but that the wool is offered subject to minimum reserve prices. If prices fall below this minimum the Wool Disposal Commission is prepared to buy at the reserve price.[1]

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[1] Dairy Products Marketing Commission Act, 1947, para. 16. [2] Ibidem.

[3] See Primary Production in New Zealand, Department of Agriculture, Wellington, 1948, p. 123.

[4] Reported in ' Dominion ' newspaper, 15–9–1948.

Developments in the wool industry are of particular interest because they show that even the most individualistic of New Zealand's primary producers tend now to look for a State guarantee of their incomes.

V. Some Results of the Experiment

No doubt, the regulation of farm incomes in New Zealand is a notable experiment in ' dirigisme '. What has been its impact on the economy of the country and what have been some of the discernable results ?

If we first consider the proportion of incomes withdrawn from circulation due to the State regulation of farm incomes in New Zealand we notice that the absolute amount is not large compared to the total of private incomes disbursed. The following table will illustrate this point :

Table VIII

Farm Stabilization Balances as Percentages of Private Income in £NZ millions

(1) *Year*	(2) *Private Income*	(3) *Retained Farm Income*	(4) *Farm Income Withheld*	(5) (4) *as per cent of* (2)	(6) (4) *as* % *of* (3)
1939–40	216.4	25.4	0.2	0.1	0.8
1940–1	233.9	27.0	1.0	0.4	3.7
1941–2	253.9	N.A.	2.1	0.8	N.A.
1942–3	291.4	N.A.	2.4	0.8	N.A.
1943–4	326.4	N.A.	5.1	1.6	N.A.
1944–5	334.5	N.A.	7.2	2.2	N.A.
1945–6	366.2	41.5	5.5	1.6	13.2
1946–7	407.5	48.0	9.0	2.2	18.7

Source : Budget 1948, Tables XI and XIII. Stabilization Account Balances have been adjusted to a March year.

It can be seen that the proportion of farm incomes withheld to total private income is extremely small. Nevertheless the proportion of withholdings to retained farm incomes is not inconsiderable, at least during the last two years, so that it can be assumed that rural spending power has, to some extent at least, been kept under control. It must, however, be borne in mind that the regulation of farm incomes was part of a larger scheme of price stabilization. It was supposed to keep prices from spiralling upwards and it served as a powerful argument in the case of the Government for wages stabilization.

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[1] Marketing Department (Export Division), 1946, p. 34.

The result of this was that wages and salaries subject to Arbitration Court awards were controlled much more effectively than would have been possible without State regulation of farm incomes. Accordingly a shift occurred in the distribution of private incomes between various groups as becomes evident from Table IX.

Table VIII shows that the share of wages and salaries in the total has fallen more rapidly in New Zealand than it has in the United Kingdom. But if Pay and Allowances of the Armed Forces are taken into account the drop is not so pronounced. The tendency has been for the incomes of those groups to rise fastest which have been least ready for State regulation of incomes. Some trade unions have, therefore, complained that ' stabilization means wage-pegging '. It can be seen that there is some justice in this suggestion. On the other hand, the drop in earned incomes of salary and wage earners has to some extent been made up by an increase in social services. It almost looks like a revival of the ' Speenhamland ' policy, and is an interesting sidelight on the limitations of a Labour Government's policy under a still predominantly capitalist system of society.

By contrast the share of distributed farm incomes has shown great stability. This has, however, changed in favour of the farming community in the 1947–48 season when produce prices soared to new heights.

A comparison in the development of price indices between the United Kingdom and New Zealand reveals a certain measure of success of the policy income regulation, see Table X.

Finally, New Zealand export prices have remained highly competitive thanks to the Government's policy. This is illustrated by Table XI.

As far as the effect of State regulation of farm incomes on production is concerned a definite swing from dairy farming to the more remunerative sheep farming can be discerned, see Table XII.

The Government has, so far, not taken any serious view of the changes that have occurred, but has tended to emphasize the over-all increase in farm production. How far such an attitude will be reconcilable with an optimum allocation of factors in times of shrinking markets is an open question. But so far, State regulation of farm incomes in New Zealand has not been put to this test.

There is another aspect of the regulation of incomes of interest to the economist. If it is possible to regulate farm incomes why is it impossible to conceive of a scheme of ' stabilization accounts ' for the whole economy ? The answer to this question would disclose much about the nature of subsidies, profits and losses in industry, saving and investment, and the character of consumers' demand for various classes of products. Unfortunately, we have to leave the reader pondering over this problem himself. The State regulation of farm incomes is sufficiently interesting a topic to have given scope for this paper.

TABLE IX

Percentage Distribution of Various Items of Private Income

Item	1938–39		1939–40		1946–7		
	N.Z.	*U.K.*	*N.Z.*		*N.Z.*		*U.K.*
Wages and Salaries	55.4	55.3	51.2		45.9		50.0
Pay, etc. Armed Forces ...	0.4	1.5	1.3		4.2		5.4
Income from Farming :							
(*a*) Paid out	40.4	38.0	11.7	42.3	11.8	41.4	35.3
(*b*) Withheld ...			0.1		2.2		
Profits, etc.			20.8		21.2		
Rent, etc.			9.7		6.2		
Social Benefits and Transfers	3.8	5.2	5.2		8.5		9.3
	100.0	100.0	100.0		100.0		100.0

Note. U.K. year is the calendar year.
Sources : N.Z. Budget 1948, Table II ; Cmd. 7371, Table IV.

TABLE X

Cost of Living Indices New Zealand and United Kingdom
1914=100

Year	*U.K.*	*N.Z.*
1930	158	157
1933	140	126
1936	147	137
1939	157	158
1947	205	186

Sources : For U.K. International Labour Review 1936, and 1945 ; and Monthly Digest of Statistics, June, 1947. For N.Z. Official Year Book, 1946, p. 594.

TABLE XI

Prices paid by the United Kingdom for 1 cwt. of Butter and Cheese f.o.b.

Year	*Butter*			*Cheese*		
	N.Z.	*Denmark*	*Danish Price as % of N.Z.*	*N.Z.*	*Canada*	*Canadian as % of N.Z.*
1939	103/6	125/–	121			
1940–41				64/3	70/9	110
1948–49	235/–	321/6	137	133/–	170/–	128

Source : 24th Annual Report of the N.Z. Dairy Board, p. 34.

TABLE XII

Trends in Volume of Farm Production in N.Z. 1938–39=100

Year	*Butterfat*	*Meat*	*Wool*
1938–39	100	100	100
1939–40	108	111	95
1940–41	116	119	101
1941–42	109	121	106
1942–43	102	127	104
1943–44	97	117	101
1944–45	108	126	113
1945–46	93	128	111
1946–47	102	131	110

Source : Monthly Abstract of Statistics.

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Now that there are three full years of index numbers for the Interim Index of Industrial Production it is possible to make a first attempt to correct the Index for seasonal fluctuations. The official explanation states that ' to ensure comparability between different months, adjustments have been made, where necessary, for variations in the number of days (excluding Sunday) in each month.' Further seasonal variations will therefore occur, because of public and other holidays, climatic conditions, and so forth. These follow a sufficiently marked pattern to be approximately measured from three years' experience, and to permit us to correct the Index roughly for seasonal fluctuations. The corrected Index is examined in this paper, and conclusions are drawn about the cost of the 1947 fuel crisis, the post-war output compared to pre-war, and the current rate of productivity increases. The Index covers manufacturing, mining, building and public utilities.

The method of correction was to use three straight trend lines (for the first 6 months, the next 18 months and the last 12 months respectively) to eliminate trend,[1] and then to average proportional monthly deviations from the average for the whole period. The reciprocals of these average deviations were the required seasonal correction factors, by which the Index values should be multiplied, and these were as follows :—

TABLE I

Approximate Seasonal Correction Factors for the Production Index

Month	*Correction Factor*	*Month*	*Correction Factor*
January	.994	July	1.061
February	.965	August	1.092
March	.956	September	.991
April	1.004	October	.968
May	1.013	November	.960
June	.983	December	1.013

It seems that a month with no holidays except week-ends has production rather over 4 per cent above the annual average. It follows that public and other holidays cost rather over 4 per cent of the annual output of industry. It is evident that holidays are far more important causes of seasonal variations than climatic influences. Output in January, however, does seem to be affected by the weather, since a holiday on New Year's Day is not widely recognised outside Scotland. Production recovers in the spring, running well in March and April (if one allows for Easter), but summer influences begin to appear in May, which is a bad month, even allowing for Whitsun. Output falls as the summer progresses, reaching the annual minimum in August and then recovering to the spring level in the late autumn.

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[1] Diagram A shows three fairly definite periods of recovery. Allowances were made for the late Whitsun in 1946 and the early Easter in 1948 by assuming that a public holiday of 1 day reduced the Index by 3 points. Estimates were made to replace the values for the first 4 months of 1947. The correction factors shown here are for a standard year, in which Easter falls wholly in April and Whitsun in May. Further corrections ought to be made for the varying number of Saturdays, but this would hardly be justified in view of the roughness of data, the short experience on which to base seasonal corrections, etc.

DIAGRAM A. Production Index (1946=100).

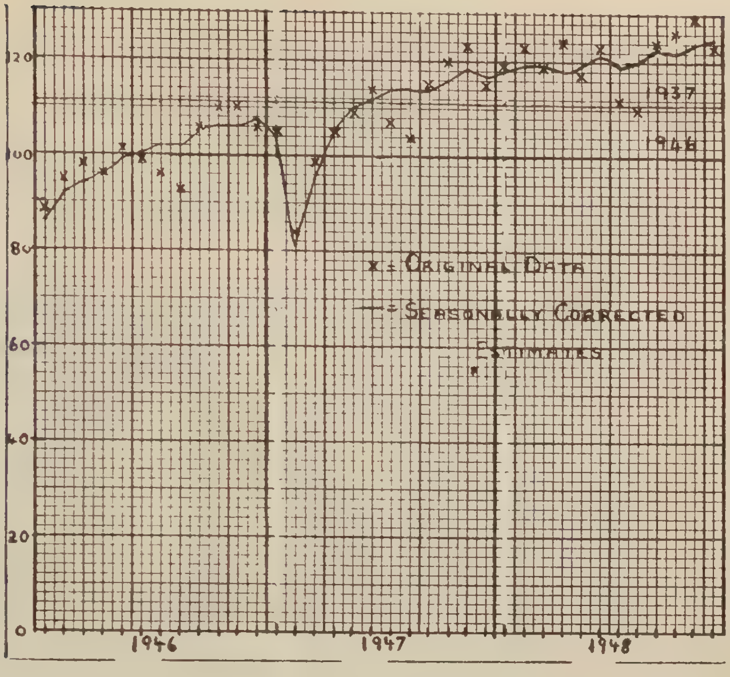
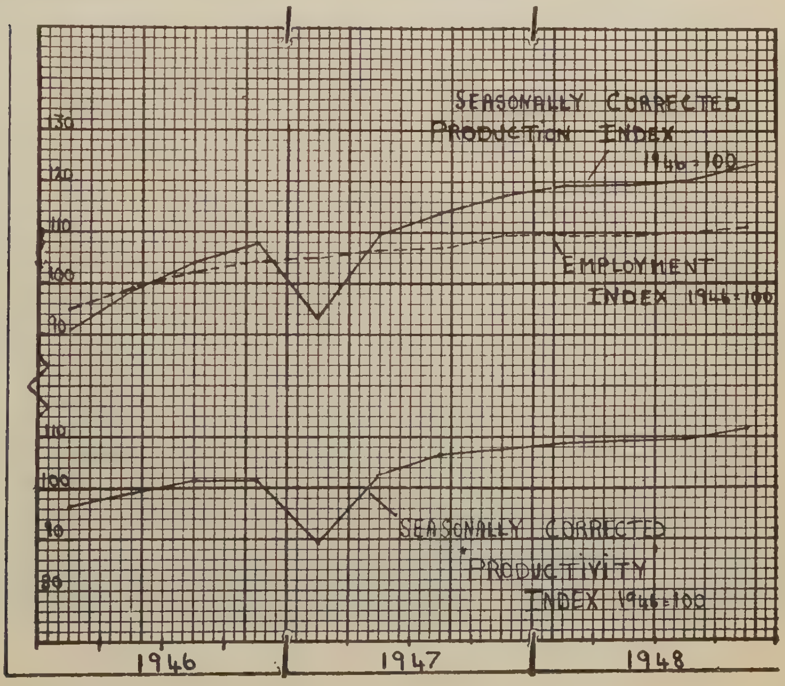


DIAGRAM B. Production, Employment and 'Productivity' Indices.



The original published index numbers, which are shown in the left-hand columns of Table II, were multiplied by these correction factors to obtain the seasonally-corrected estimates shown in the right-hand columns.[1] The data from this table are shown graphically in Diagram A, together with the number of 111 for 1937,[2] the best of the immediately pre-war years, and doubtless the best year ever before. The general pattern of results does not seem to be greatly different from that shown by the *London and Cambridge Economic Service* series on a ' working day ' basis[3] though the rise in 1948 seems slightly higher here.

TABLE II

Original and Seasonally-Corrected Production Index Numbers, 1946–8 (1946 Ave. = 100)

Month	*Original Index Numbers*			*Corrected Index Numbers.*		
	1946	*1947*	*1948*	*1946*	*1947*	*1948*
January	89	105	119	88	104	118
February	95	84	123	92	81	119
March	98	99	119	94	95	119
April	96	105	124	96	105	118
May	101	109	117	99	110	119
June	99	114	123	100	112	121
July	96	107	112	102	114	119
August	93	104	110	102	114	120
September	106	115	124	105	114	123
October	110	120	126	106	116	122
November	110	123	129	106	118	124
December	106	115	123	107	117	125

The gradual reduction in the rate of increase of the Index is quite evident. The initial rise may be exaggerated if the Index is taken as a measure of work done, because much of production in the winter of 1945–6 was increasing ' work in progress ' rather than output, causing the output index to rise rather too rapidly as the increase in ' work in progress ' tapers off.[4] The depth and duration of the fall of output caused by the weather-and-fuel crisis[5] of 1947 is also brought out strongly by the seasonally-corrected graph. Seasonally-corrected values for the Index of 108, 109, 110, 111 and 112 could have been expected for the months of January, February, March, April and May, giving non-corrected values of 109, 113, 115, 111 and 111. The difference between these and the actual values was a total of 57 Index-units. The total value of the industrial sector's output in 1946 was about £4,300 millions,[6] or slightly over £3.5 millions per Index-unit per month. Allowing for a price increase of about 5 per cent, an Index-unit in the first quarter of

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[1] The same correction was made for Whitsun 1946 and Easter 1948 as noted above.

[2] *Board of Trade Journal*, September 11th, 1948, p. 187. The number obtained by using 1946 weights is taken. It should be noted that using 1935 weighs a number of 104 was obtained.

[3] *L. & C.E.S. Bulletin*, November, 1948, p. 130, and February 1949, p. 12.

[4] This effect is greatly reduced by the fact that the Index measures production at several stages (*e.g.* at spun yarn, cloth, and clothing).

[5] It is of course impossible to say whether it was mainly due to fuel shortage or to the very bad winter. Either alone would not have affected production nearly so drastically as both together did.

[6] A corrected version of the estimate given in the February—March BULLETIN, p. 64.

1948 would be worth about £3.75 millions, and the total immediate loss in the industrial sector (this was virtually the only sector affected) due to the winter crisis can be put at about £210 millions in current prices[1]—a loss probably smaller than popularly believed. The delay in recovery may, however, have had more lasting effects on production.

TABLE III

Employment and Output (*1946*–8)* (1946 Aver. = 100)

		1 *Output*	2 *Employment*	3 '*Productivity*' (1 ÷ 2)
1946	First quarter	91	95	96
	Second "	98	99	100
	Third "	103	102	101
	Fourth "	106	104	102
1947	First "	93	105	89
	Second "	109	106	103
	Third "	114	107	106
	Fourth "	117	109	107
1948	First "	119	109	108
	Second "	119	110	109
	Third "	121	110	110
	Fourth "	124	111	112

* Rounded from 4-figure data.

A main cause of increased output over this period has been the rise in industrial employment, due to the demobilisation of the forces. If we add together the total manpower of 'mining and quarrying', 'gas, water and electricity supply', 'manufacturing industries' and 'building and civil engineering', we get the approximate total manpower responsible for production in the industrial sector. To show the part played by increased manpower in the industrial sector, Table III gives it as an index with a 1946 base,[2] alongside the average seasonally-corrected production index for each quarter.

The third column is the quotient obtained by dividing the production index by the employment index. It is labelled 'productivity' for want of a better name, but it should be emphasised that we are using a production index which is a 1946-weighted index for a whole sector of the economy, and an employment index treating every worker as of equal value. Any redistribution of the labour force to industries with a high value of output per man in 1946 will therefore appear as an increase in 'productivity', as will an increase in the proportion of adult male workers. In addition we are dealing with the whole value of output seasonally corrected by a set of factors which implicitly average the annual holidays for the whole period. An increase in holidays will therefore appear as a fall in ' productivity ', while an increase in hours worked will appear as a rise. In addition, of course, 'productivity' is affected by mechanisation, etc., as well as increased effort or efficiency. The data in Table III are shown in Diagram B.

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[1] Divided as follows: January, £15 millions; February, £110 millions; March, £60 millions; April, £20 millions; and May, £5 millions. Sir Stafford Cripps estimated at the beginning of May 1947 that the crisis had caused a loss in exports alone of £200 millions (*Economist*, Vol. CLII, p. 727), and appears to have characteristically exaggerated the cost.

[2] The manpower for February, 1947, was obtained by interpolation. In view of factory closures, the figures for 'employment' and 'productivity' in the first quarter of 1947 have little meaning. The average manpower in the base year, 1946, was 8.885 million. Seasonal correction did not appear necessary for manpower figures.

Bearing these important qualifications in mind it is clear that there have been substantial increases in 'productivity' so defined, over this period, and that it is now definitely above pre-war. In June 1939 total manpower in the sectors concerned was 9.24 millions. If we assume that total manpower varies with insured employment, we obtain a manpower estimate of 8.85 millions for the average of 1937. So that with a 1946 base we have index numbers for 1937 of 111 for production and 100 for employment, and 'productivity' apparently 11 per cent higher than in 1946. On this basis pre-war ' productivity ' was not passed until the autumn of 1948. But on the other hand the proportion of men in the labour force was very much higher pre-war, and on a different system of weights (the 1935 ones), the production index was 104 in 1937, which would lead one to the conclusion that pre-war ' productivity ' was passed in the spring of 1947, despite the adverse change in the sex ratio. The difference between the two results is due to a negative correlation between production changes and price changes from 1935 to 1946. These qualifications make it virtually impossible to answer the question: when did we pass pre-war ' productivity ' ? One can only say that at the latest it was passed in late-1948, but that on other weighting systems, and with allowance for changes in the sex ratio, it was passed in early 1947 or even in 1946.[1] Since ' productivity ' has been slow in recovering in building and mining, performance in manufacturing must have been slightly better than indicated above.

Ignoring the two first quarters of 1947, for which ' productivity ' has little meaning, and comparing each quarter with the corresponding quarter of the previous year, there seems to have been a steady rise of 4 to 5 per cent per annum, though this must be judged most cautiously.[2] The slowing down of the rate of increase of output in 1948 is clearly due rather to a slowing of the rise in employment than to a reduction in productivity increases. The upward turn of the productivity curve at the end of 1948 is, however, probably spurious, being due to the relatively low figure in the third quarter, which may be accounted for by longer holidays than for the average of the 1946–8 period. Since the rate of increase of annual productivity seems to have been about constant, hourly productivity must have been increased more from 1946 to 1947 than from 1947 to 1948, for hours worked per week fell in the first but not in the second period,[1] and annual holidays probably increased more in the first than the second. The higher increase in the earlier period can probably be accounted for partly by the greater change in the sex and age ratios then, which meant a concealed rise in productive potential, and partly by a greater easing of material ' bottlenecks '. These two influences have, however, continued to operate, and are responsible for some of the increase in ' productivity ' shown by the 1948 trend. Correction for these influences would, therefore, show a lower rate of ' productivity ' growth. There has, however, been some improvement in quality of output which has worked the other way.

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[1] I should like to take this opportunity of withdrawing some estimates shown in the BULLETIN for July 1947(p. 234) which gave the impression, despite some qualifications, that the productivity for the whole economy in 1946 was considerably above pre-war.

[2] Mr. Reddaway, writing in the *London and Cambridge Economic Service Bulletin*, for February 1949 (p. 13), obtains a substantially smaller rise of ' rather over 2 per cent ' for the second half of 1948 over the second half of 1947, using the services of ' B ' Index. It is

The *Economic Survey* for 1949 forecasts a rise of about 2½ per cent for the economy ' outside the Government sector '. Since the industrial sector appears to have been responsible for nearly two-thirds of the non-Government output in 1948,[2] and only small increases can be expected in other sectors, this implies an increase in productivity in the industrial sector of about 3½ per cent. The definition of ' productivity ' implied in this article is appropriate to the *Economic Survey's* estimates, and hence the fundamental ' target ' in the *Survey* seems if anything to err, like other recent Government pronouncements, on the conservative side. An increase of slightly more than 2 per cent over the average of 1948 appears already to have been achieved by the end of the year. 3½ per cent per annum as a continuing target is equivalent to a cumulative rate of about ¼ per cent per mensem, and if the starting rate at the beginning of 1949 was 124.5 we can estimate the monthly targets for the seasonally-corrected production Index and hence, by applying the reciprocals of the correction factors, the uncorrected index numbers that will be 'satisfactory' on this basis. These are shown in Table IV. In view of possible growth of unemployment and of the armed forces, no increase in the labour force is assumed.[3]

This table is unfortunately not as useful as might appear. Any deviations from target performance must be judged with the following cautions in mind: (*a*) The actual Index number and the target are only given to the nearest whole number[4]; (*b*) Constant employment is assumed above; (*c*) The seasonal index implied is as yet only tentative;[5] (*d*) The initial figure assumed

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not clear, why the ' rather over 4 per cent ' rise in production on a working day basis he uses this calculation differs from the 6 per cent rise in the original figures for the same series and the same period, mentioned on p. 11. Correction for the number of working days in each of two similar periods ought hardly to affect the comparison. If the latter figure (6%) were used for the output rise, the implied increase of ' productivity ' will be very close to that shown above.

[1] *Vide Ministry of Labour Gazette*, March 1949, p. 85.

[2] See an article by the author and others in the *Financial Times*, April 8th, 1949.

[3] Allowance is made for the late Whitsun this year.

[4] The total Index number for the whole sector could usefully be extended to four figures now, at least after all the data for a month have become available.

[5] The values for the holiday months in particular may be too high, because of the extension of holidays since 1946. And slightly lower values for months with 5 Saturdays (January, April, July, October and December) might be expected.

TABLE IV

Targets for Production Index in 1949

(Assuming 3½% per anum rise in productivity) [1946=100]

		Seasonally-Corrected Index	Original Index
1949	January	124.5	125
	February	124.8	129
	March	125.1	131
	April	125.4	125
	May	125.7	127
	June	126.1	125
	July	126.4	119
	August	126.7	116
	September	127.0	128
	October	127.3	132
	November	127.6	133
	December	128.0	126

of 124.5 may be .5 in error, or more. These qualifications mean that only a succession of increasing deviations from the targets could be considered a signal of a definite deviation from the ' productivity ' increase of 3½ per cent per annum in this sector.

The use of this target rate does not imply agreement that 3½ per cent is an adequate rate of increase in industrial ' productivity '—particularly on this definition. At this rate we would take a very long time, a generation in fact, to overtake American productivity performances, even if there were no further increases whatsoever in the United States. That the Government should consider a productivity increase of 2½ per cent for the whole economy the implication of current trends indicates the need for much more emphasis on productivity increases in fiscal and industrial policy.

DUDLEY SEERS.

The Reform of the Control of Industrial Location

At the end of the war the Coalition Government put forward a Distribution of Industry Bill which contained a clause which would have given powers to prohibit new factory building in certain areas of the country. This clause was dropped during the passage of the Bill through Parliament. The Labour Government in the Town and Country Planning Act provided, however, that applications to local planning authorities in respect to industrial building in excess of a dimension of 5,000 square feet must be accompanied by a Board of Trade certificate. In addition the system of compulsory licensing of buildings gives much more comprehensive powers to the Government in deciding industrial location.

The streamlining of controls has lately become increasingly popular. It will be instructive, therefore, to observe the effects of the ‘ simplification ’ of the control over industrial expansion which was undertaken on June 30th, 1948, under the Town and Country Planning Act. Hitherto responsibility for the permission of any expansion of industrial capacity had rested with a panel on which the Ministry of Town and Country Planning and the Ministry of Labour were represented, and which therefore could take a balanced view of the advantages and disadvantages of particular projects. The administrative effect of the change last June was to transfer responsibility to the Regional Officer of the Board of Trade. Table I shows the distribution of the approvals and licences of new factory buildings from December 1944 to April 30th, 1947, and the changes from that date till December 1948.

From December 1944, to June 30th, 1948, projects totalling almost £173 millions were approved in Great Britain. Of this roughly £90 millions were in development areas, £84 millions were outside development areas. Since the Board of Trade assumed responsibility for approvals, projects totalling £49 millions received consent. Of this £5 millions were in development areas, the rest, i.e. not less than £44 millions or almost nine-tenths of the total, *outside* development areas.

The President of the Board of Trade in the Debates of May 25th, 1948, and September 17th, 1948,[1] stated that Government policy remained unchanged. Replying to a Debate in the House of Lords on January 26th, 1949, Lord Lucas on behalf of the Government stated ‘ The Development Areas have had, and will continue to have, preference, for reasons apparent to all. The job in the Development Areas is not yet complete . . .’ These statements are in strange contrast to the noticeable change of policy which has actually taken place.

This is not to say that some change in the policy with respect to development areas was not justified. Once unemployment in those areas had been reduced (or could be expected to be reduced on completion of the projects

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[1] *Hansard*, Vol. 451, No. 122, esp. col. 157, and *Hansard*, Vol. 456, No. 4, esp. cols. 463–464.

NEW FACTORY BUILDINGS IN GREAT BRITAIN (CUMULATIVE TOTALS)

(£1,000's)

	Approvals[1]						*Licences*					
	Total		*In Development Areas*		*Outside Development Areas*		*Total*		*In Development Areas*		*Outside Development Areas*	
	No.	*Value*	*No*	*Value*	*No*	*Value*	*No*	*Value*	*No.*	*Value*	*No.*	*Value*
Dec. '44—30 April '47 ...	2,746	119,457	908	60,088	1,838	59,369						
Dec. '44—29 Feb. '48 ...	3,446	174,645	1,220	91,791	2,226	82,854	2,413	111,953	1,033	70,999	1,380	40,954
Dec. '44—30 June '48 ...	3,454	172,979	1,183	89,335	2,271	83,644	2,950	131,270	1,035	68,416	1,915	62,854
Dec. '44—30 Dec. '48 ...	4,434	221,337	1,267	94,307	3,167	127,030	3,264	142,220	1,094	72,341	2,170	69,879

QUARTERLY CHANGES IN APPROVALS AND LICENCES

May & June 1947 (2 mths.)	202	27,080	57	17,577	145	9,503						
1947—3rd quarter ...	311	14,630	111	5,007	200	9,623						
4th quarter ...	62	3,494	7	324	55	3,170						
1948—1st quarter ...	121	9,576	129	8,327	—8	1,249						
2nd quarter ...	12	—1,258	—29	—1,988	41	730	533	19,522	12	—2,165	521	21,687
3rd quarter ...	347	15,265	35	3,218	312	12,047	91	4,013	14	1,999	77	2,014
4th quarter ...	633	33,093	49	1,754	584	31,339	223	6,937	45	1,926	178	5,011

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[1] Minus signs indicate that cancellations exceeded new approvals.

already approved) to levels comparable to that in outside areas, a change of policy would be obviously required. The creation of indiscriminate over-employment in the development areas would be the more objectionable as these areas contain important basic industries whose decline in the inter-war period was responsible for the depression in those areas and which are now undermanned. It would appear, however, from the contrast of the statements in Parliament with the figures, that the changes have been much intensified since the change in administrative arrangements. It is possible that the Board of Trade is much more exposed to pressure and would be more sympathetic to the point of view of industrialists wishing to initiate new projects or extend existing capacity.[1] Moreover, it should be remembered that permission to initiate new expansion outside development areas might also create serious bottlenecks unless it is undertaken with due regard to the volume of manpower released as a result of either the decline of other industries or as a result of technical progress. At any rate the discrepancy between Government statements and actual approved policy is, plainly brought out in the Tables on page 108. The case for a review of the present arrangements of controlling the location of industry, and particularly, the need for the restoration of the regional location panels on which the Ministry of Town and Country Planning and the Ministry of Labour are adequately represented seems to be established.

T. BALOGH.

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[1] It is interesting to recall the evidence given on behalf of the Board of Trade before the Barlow Commission (Minutes of Evidence, Oct. 20th, 1937, Section v, paragraph 115. 'It can probably be assumed therefore that in general the present distribution of the industries of the country approximates very closely to the distribution which enables each of those industries to operate most economically and efficiently, and there is, therefore, reason to suppose that this distribution is well adapted to serve the economic interests of the country as a whole.'

TABULAR APPENDIX.

EDITORIAL NOTE

Tables comparing the broad trends of production, prices and wages, the volume of foreign trade and the supply of coal for a number of European countries, the United Kingdom and the U.S.A. are given below. For some countries more up-to-date figures are available than for others. These time lags will, it is hoped, be reduced in future and the tables will be extended when more information becomes available. This index numbers are based as far as possible on 1938.

Explanation of symbols :

... the figure is not available.
(—) figures provisional or approximate.
— figure is negligible.

TABLE I.

Industrial Production (or Employment)

Index Numbers 1938=100

Index Numbers	Monthly Averages					1948			1949	
	1939	1945	1946	1947	1948	Oct.	Nov.	Dec.	Jan.	Feb.
Industrial Production[1]										
U.S.A.[2]	122	228	191	210	216	219	219	216	215	212
United K.[3] [4]	104[14]	...	100	108	121	126	129	123	123	130
France[4]	..	...	79	95	108	99	111	115	115	115
Belgium[5]	95	...	...	96	103	108	107	108	...	...
Netherlands	111	32	74	94	113	123	125	125	116	...
Denmark	105	74	101	116	129	142	143	124	128	136
Sweden[6]	109	112	135	138	143	145	146	146	146	...
Norway[4]	107	69	100	115	125	128	134	125	135	...
Finland[7]	...	45	58	74	85	89	88	89	...	...
Poland[8]	...	...	91	121	...	140	149	138	...	...
Czechoslovakia[9]	...	...	...	87	103	110	108	105	106	108
Bulgaria 1939=100	100	112	115	137	...	213	204	...	...	...
Italy[7] 1947=100	...	...	...	100	107	115	112	112	...	...
Germany[10]	...	...	34	40	60	74	75	79	81	80
Austria[11]	...	...	...	61	...	103	101	...	...	...
Industrial Employment:										
Switzerland[12]	98	110	123	134	136	...	...	134	...	...
Great Britain[13]	100	102	98	106	108	...	...	109	110	110

Sources: Official Statistics. For *Belgium*: Institut de Recherches Economiques et Sociales, Louvain; for *Sweden*: Sveriges Industriförbund; for *Finland*: Unitas; for *Germany*: Control Commission (British Element); for *Austria*: Monatsberichte des Oest. Institutes für Wirtschaftsforschung.

[1] Mining and Manufacturing, except Denmark (manufacturing only), France and Netherlands (mining, manufacturing and public utilities); see also Notes 3 and 10.

[2] Adjusted for seasonal variations.

[3] Interim Index of industrial production (mining, manufacturing, building and public utilities) 1946=100. [4] Adjusted for number of working days.

[5] Revised Index (L'Institut de Recherches Économiques et Sociales, Louvain), 1936–1938=100.

[6] Annual Index of Kommerskollegium linked to monthly index of Sveriges Industriförbund. Adjusted for seasonal variations and for numbers of working days.

[7] Export industry only.

[8] Institute for Economic Research. Annual indexes comprise the production of sugar which is not included in monthly indexes. [9] Provisional index (revised) 1937=100.

[10] Bizonal Area. 1936=100. All branches of industry, including mining and public utilities, except building and food processes.

[11] Revised series. Industrial key materials and consumers' goods industries. 1937=100.

[12] Wage earners employed in manufacturing and building. Quarterly index figures.

[13] Employment (including employers and self-employed) in manufacturing (new series linked with former series) June 1939=100; all annual figures refer to June. [14] 1938.

TABLE II

Wholesale Prices[1]

Index Numbers : 1938=100

Index Numbers		Monthly Averages					1948		1949		
		1939	1945	1946	1947	1948	Nov.	Dec.	Jan.	Feb.	March
U.S.A.	a[2]	98	135	154	193	210	209	206	204	201	...
U.K.	a	101	167	173	189	216	217	218	218	218	217
	b[3]	91.5	138	142	155	178	179	180	180	180	179
France	a	105	375	648	989	1712	1977	1974	1946	1899	...
	b	92	(275)	189	289	277	320	319	315	308	...
Holland	a	102	177	245	266	276	284	285	289	...	...
	b	99	(122)	169	183	189	194	195	197	...	...
Switzerland ...	a	104	206	201	209	217	217	216	215	214	212
	b	103	...	204	213	221	221	220	219	218	217
Sweden	a	103	174	168	179	192	195	195	195	195	...
	b	98	...	173	199	212	215	215	215	215	...
Denmark	a	105	190	187	207	227	231	235	234	233	233
	b	98	...	180	198	216	220	224	223	222	222
Norway	a	102	177	169	175	181	182	183	183	183	183
	b	97	...	138	144	148	149	150	150	150	150
Finland	a	106	386	605	724	956	971	968	955	951	...
	b	98	...	207	248	326	331	330	326	324	...
Czechoslovakia ...	a	115	172	301	316	(330)	336	340	...	...	...
	b	114	...	170	181	(190)	193	196	...	...	...
Italy	a	105	2060	2883	5157	(5442)	5674	5697	5703	...	...

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[1] Prices expressed in national currencies and in U.S. dollars at official rates.

[2] a=in national currency. [3] b=in U.S. currency.

TABLE III. *Wages*

Index Numbers[1]	Monthly Averages					1948		1949	
	1939	1945	1946	1947	1948	Nov.	Dec.	Jan.	Feb.
U.S.A.[2]	101	163	173	195	212	219	219	220	220
United Kingdom[3] ...	...	149	161	168	176	178	178	180	180
Switzerland[4] ...	100	146	160	174	182	...	183	...	...
France[5]	...	328	448	525	799	...	878	...	...
Netherlands[6] ...	100	131	163	168	177	181	183	188	...
Czechoslovakia[7] ...	100	182	304	314	316	317	317	...	...

[1] Base periods : U.S.A. and France : 1938=100 ; United Kingdom : September 1939=100 ; Switzerland : January–August 1939=100 ; Netherlands : 1938–9=100 ; Czechoslovakia : March 1939=100. [2] Average hourly earnings in manufacturing. [3] Weekly wage rates; Ministry of Labour (all industries). [4] Hourly rates in industry; quarterly figures. [5] Hourly rates in the metal industry in the Paris region. The figures for 1948 refer to the average of the quarter.

[6] Hourly rates in industry. Men only. [7] Hourly rates in manufacturing.

TABLE IV. *Foreign Trade* Volume Index[1]

Index Numbers		Monthly Averages					1948			1949	
		1939	1945	1946	1947	1948	Oct.	Nov.	Dec.	Jan.	Feb.
U.S.A.	Imports	114	130	139	133	150	151	140	178	...	...
	Exports	105	183	191	255	197	195	158	247	...	...
U.K.	Imports	97	62	69	78	81	...	...	80[2]	...	...
	Exports	94	46	99	109	136	...	...	147[2]	162	143
France	Imports	88	34	112	107	102	...	98	108	104	...
	Exports	99	10	43	83	96	...	99	111	115	...
Switzerland ...	Imports	118	31	105	147	147	127	132	146	124	111
	Exports	97	57	101	115	126	146	139	170	106	113
Sweden	Imports	117	30	94	124	113	...	...	105	...	...
	Exports	108	50	66	73	85	...	...	102	...	...
Norway	Imports	111	46	78	118	100	129	118	135	66	126
	Exports	108	19	61	81	81	77	83	85	80	82
Poland[3]	Imports	...	105[4]	172	139	148	143	136	139	...	...
	Exports	...	17[4]	33	54	98	90	128	157	...	...
Czechoslovakia[5] ...	Imports	...	...	35	77	...	...	...	...	...	...
	Exports	...	...	26	56	...	...	...	...	...	...
Hungary	Imports	121	1	17	52	62	58	55	71	...	...
	Exports	116	...	15	26	43	49	64	93	...	...
Austria[5]	Imports	...	...	...	24	47	49	51	67	55	...
	Exports	...	...	...	29	54	58	65	73	68	...

[1] Deflated values (1938=100). [2] Average of quarter.

[3] From the Statistical Tables of the Polish Institute for Economic Research.

[4] Monthly average of 3rd and 4th quarter. [5] 1937=100.

TABLE V. *Production of Steel* (*Ingots and Castings*)

Thousand metric tons	Monthly Averages					1948			1949	
	1937	1938	1946	1947	1948	Oct.	Nov.	Dec.	Jan.	Feb.
U.S.A.	4282	2400	5035	6418	6693	7246	7065	7050	7423	6771
Great Britain ...	1101	881	1074	1057	1260	1207	1231	1433[1]	1175	1264
France	660	518	367	479	604	455	682	710	734	720
Belgium	322	190	190	241	326	372	352	364	370	353
Luxembourg ...	209	120	108	143	204	224	224	243	228	226
Sweden	94	83	101	99	105	104	116	131	...	...
Poland	122	120	102	132	...	...	...	...	...	...
Czechoslovakia ...	192	153	139	190	...	231	224	...	...	...
Hungary	55.4	54.0	29.4	49.7	...	...	...	...	...	...
Italy	175	194	96	142	177	182	178	168	...	...
Austria	54.1	...	15.6	29.7	54.0	58.8	55.5	58.3	62.9	...
Germany										
Bizone[2] ...	1187[3]	...	207	246	448	610	599	612	651	662
French Zone ...	...	...	25	63	110	133	135	145	151	...

Source : U.N.O. Monthly Bulletin and other official statistics.

[1] Five weeks. [2] Steel ingots only. [3] 1936.

TABLE VI. *Coalmining and Supplies*

A. Hard Coal Output Monthly Figures or Averages[1]

Million metric tons ...	Average 1946	1947	1948	1948 Sept.	Oct.	Nov.	Dec.	1949 Jan.	Feb.	Last m. as % of m. av. 1937
U.S.A.[2]	44.8	52.0	49.2	51.9	53.0	49.4	49.6	46.2	43.0	114
United Kingdom ...	16.1	16.7	16.7	20.7[3]	17.2	17.4	20.1[4]	16.8	17.5	86
West Germany[3] ...	4.5	5.9	7.3	7.6	7.9	7.7	8.2	8.2	7.9	69
France (incl. Saar)...	4.6	4.7	4.6	4.8	1.6	3.7	5.3	5.5	5.3	114
Belgium	1.9	2.0	2.2	2.3	2.4	2.3	2.4	2.4	2.4	98
Holland	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	75
Poland	3.9	4.9	5.9	6.1	6.3	6.5	6.0	6.0	5.7	103
Czechoslovakia ...	1.2	1.4	1.5	1.4	1.5	1.6	1.5	1.5	1.4	102

B. Total Imports of Solid Fuels including Bunkers (ton for ton). Monthly Figures of Averages

Thous. metric tons	Average 1946	1947	1948	1948 Sept.	Oct.	Nov.	Dec.	1949 Jan.	Feb.	Last m. as % of m. av. 1937
France	904	1373	1445	1500	1201	1225	1462	1419	1.759	71
Belgium ...	262	462	224	158	135	125	140	94	98	14
Holland	275	330	324	350	393	257	326	275	342	45
Luxembourg ...	154	187	253	254	286	281	285	270	260	83
Norway	152	203	167	189	151	145	189	111	171	59
Denmark ...	314	363	308	361	276	243	347	430	493	98
Sweden ...	297	496	585	496	512	571	601	581	535	72
Switzerland ...	128	210	220	185	177	217	197	166	148	51
Italy	476	757	656	743	640	526	552	501	543	50
Finland	78	132	190	233	232	232	146	46	15	8
Portugal ...	50	76	70	109	86	64	74	113	70	62
Austria	...	...	...	383	385	400	482	552	510	180
Czechoslovakia ...	13	88	179	184	141	156	260	295	254	212

C. Exports of Solid Fuels excluding Bunkers (ton for ton). Monthly Figures or Averages.

Thous. metric tons	Average 1946	1947	1948	1948 Aug.	Sept.	Oct.	Nov.	Dec.	1949 Jan.	Last m. % of m. av. 1937
U.S.A.	4105	5919	...	5677	4842	4435	3706	...	...	(314)
Thereof to Europe[6] ...	1370	2811	...	1745	1280	903	798	824	631	...
Great Britain ...	420	96	963	1104	1228	1380	1213	1283	1162	32
West Germany[3]	972	880	1463	1587	1663	1566	1555	1473	1665	53
France	33	38	30	44	50	4	21	36	35	41
Saar[5] ...	119	115	424	50	52	49	66	60	61	46
Belgium ...	78	172	128	95	82	169	230	121	55	10
Holland	37	48	82	93	77	77	83	76	54	9
Poland	1349	1922	2493	2590	2671	2579	2563	2678	2764	...
Czechoslovakia	51	131	246	260	234	228	310	311	341	80

Source: European Coal Organisation; United Nations Monthly Bulletin of Statistics. Current Business (U.S.A.).

[1] Calendar months.

[2] Including a small quantity of lignite.

[3] British Zone.

[4] Five weeks; other months four weeks.

[5] Figures for 1946 and 1947 include exports to France; figures for 1948 exclude exports to France, and to French and Bizones of Germany.

[6] Reported arrivals of solid fuels in Europe from U.S.A.